#### STATEMENT OF BASIS

as required by LAC 33:IX.3109 for LPDES facilities where a fact sheet is not required under LAC 33:IX.3311, for draft Louisiana Pollutant Discharge Elimination System Permit No. <u>LA0020605</u>; At <u>19520</u>; <u>PER20070001</u> to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality

Office of Environmental Services

P. O. Box 4313

Baton Rouge, Louisiana 70821-4313

I. THE APPLICANT IS: Town of Kinder, Louisiana

Kinder Wastewater Treatment Facility

P.O. Drawer AH Kinder, LA 70648

II. PREPARED BY:

Ronda Burtch

DATE PREPARED:

August 22, 2007

III. PERMIT ACTION:

reissue LPDES permit <u>LA0020605</u>, AI 19520; <u>PER20070001</u>

LPDES application received: March 1, 2007

LPDES permit issued: September 1, 2002 LPDES permit expired: August 31, 2007

# IV. FACILITY INFORMATION:

- A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Town of Kinder and an Indian Reservation Casino.
- B. The permit application does not indicate the receipt of industrial wastewater.
- C. The facility is located on Neilson Road, 2 miles east of US Hwy, 165 in Kinder, Allen Parish
- D. The treatment facility consists of an aquaculture retrofit of a single cell oxidation lagoon, land application of harvested biomass, pre-aeration, UV disinfection, and post aeration. Disinfection is by ultraviolet light.

# E. Outfall 001

Discharge Location:

Latitude 30° 29' 11" North

Longitude 92° 49' 35" West

Description:

treated sanitary wastewater

Design Capacity:

0.605 MGD

Please note that if the facility grows to a discharge beyond the design capacity of the facility, additional sewage treatment may be required with prior approval of the facility's plans by the Louisiana Department of Health and Hospitals and notification must be submitted to the LDEQ. Also, if the expected flow reaches or exceeds the design capacity of the facility, a permit modification may be required.

Type of Flow Measurement which the facility is currently using:

Combination Totalizing Meter / Continuous Recorder

### V. RECEIVING WATERS:

The discharge is into an unnamed parish drainage ditch, thence into the Kinder Ditch, thence into the Calcasieu River in segment 030103-04075 of the Calcasieu River Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 030103-04075 of the Calcasieu River Basin are as indicated in the table below<sup>1/2</sup>:

| Overall Degree of Support for Segment 030103- 04075 | Degree of S                      | upport of Eac                      | n Use                                |   |                             |                           |             |
|---|----------------------------------|------------------------------------|--------------------------------------|---|-----------------------------|---------------------------|-------------|
| Not<br>Assessed                                     | Primary<br>Contact<br>Recreation | Secondary<br>Contact<br>Recreation | Propagation<br>of Fish &<br>Wildlife | Outstanding<br>Natural<br>Resource<br>Water | Drinking<br>Water<br>Supply | Shell fish<br>Propagation | Agriculture |
|   | N/A                              | Not<br>Assessed                    | Not<br>Assessed                      | N/A   | N/A                         | N/A                       | N/A         |

The designated uses and degree of support for Segment 030103-04075 of the Calcasieu River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

# VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 030103-04075 of the Calcasieu River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated September 29, 2006 from Watson (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

# VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

#### VIII. **PUBLIC NOTICE:**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Ms. Ronda Burtch **Permits Division** Department of Environmental Quality Office of Environmental Services P. O. Box 4313 Baton Rouge, Louisiana 70821-4313

#### IX. PROPOSED PERMIT LIMITS:

Subsegment 030103-04075, Kinder Ditch - Headwaters (unnamed tributary) to confluence with Calcasieu River, is not listed on LDEQ's Final 2004 303(d) List as impaired, and to date no TMDLs have been established. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by any future TMDLs.

Although, this subsegment is not listed on LDEQ's Final 2004 303(d) List as impaired, a wasteload allocation for the Town of Kinder has been established. Based on the Second Calibrated Model and Wasteload Allocation for the Town of Kinder STP, CBOD<sub>5</sub>, Ammonia-Nitrogen, and DO limitations have been established. The CBOD<sub>5</sub>, Ammonia-Nitrogen, and DO limitations will be permitted as follows:

Months

Limitations 5 mg/l CBOD<sub>5</sub> / 2 mg/l NH<sub>3</sub>-N / 6 mg/l DO June-November 10 mg/l CBOD<sub>5</sub> / 10 mg/l NH<sub>3</sub>-N / 6 mg/l DO December-May

# Final Effluent Limits:

# **OUTFALL 001**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

| Effluent<br>Characteristic | Monthly<br>Avg.<br>(lbs./day) | Monthly<br>Avg. | Weekly<br>Avg | Basis   |
|----------------------------|-------------------------------|-----------------|---------------|---|
| CBOD₅                      |                               |                 |               | Limits are set in accordance with the<br>Second Calibrated Model and  |
| June-November              | 25                            | 5 mg/l          | 8 mg/l        | Wasteload Allocation for the Town of<br>Kinder STP, September 1, 2000   |
| December-May               | 50                            | 10 mg/l         | 15 mg/l       | (attached) and approved by EPA in a letter dated June 4, 2001.  |
| TSS                        | 50                            | 10 mg/l         | 15 mg/l       | TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility. |
| Ammonia-Nitrogen           |                               |                 |               | Limits are set in accordance with the<br>Second Calibrated Model and  |
| June-November              | 10                            | 2 mg/l          | 4 mg/l        | Wasteload Allocation for he Town of   |
| December-May               | 25                            | 10 mg/l         | 20 mg/l       | Kinder STP, September 1, 2000 (attached) and approved by EPA in a letter dated June 4, 2001.  |
| Dissolved Oxygen           |                               | 6 mg/l<br>min.  | N/A           | Limits are set in accordance with the Second Calibrated Model and Wasteload Allocation for the Town of Kinder STP, September 1, 2000 (attached) and approved by EPA in a letter dated June 4, 2001.   |

<sup>\*\*</sup>This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.

#### Other Effluent Limitations:

### 1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Secondary Contact Recreation. According to LAC 33:IX.1113.C.5.b.li, the fecal coliform standards for this water body are 1000/100 ml and 2000/100 ml. Therefore, the limits of 1000/100 ml (Monthly Average) and 2000/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

### 2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

### 3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

# X. PREVIOUS PERMITS:

LPDES Permit No. LA0020605: Issued: September 1, 2002

Expired: August 31, 2007

| Effluent Characteristic | Discharge Lim | itations    | Monitoring Requirements |                 |
|-------------------------|---------------|-------------|-------------------------|-----------------|
|                         | Monthly Avg.  | Weekly Avg. | Measurement             | Sample          |
|                         |               |             | Frequency               | Туре            |
| Flow                    | Report        | Report      | Continuous              | Recorder        |
| CBOD₅                   |               | ·           |                         |                 |
| June-November           | 5 mg/l        | 8 mg/l      | 1/week                  | 3 Hr. Composite |
| December-May            | 10 mg/t       | 15 mg/l     | 1/week                  | 3 Hr. Composite |
| TSS                     | 10 mg/l       | 15 mg/l     | 2/month                 | 3 Hr. Composite |
| Ammonia-Nitrogen        | •             | ŭ           |                         | •               |
| June-November           | 2 mg/l        | 4 mg/l      | 1/week                  | 3 Hr. Composite |
| December-May            | 10 mg/l       | 20 mg/l     | 1/week                  | 3 Hr. Composite |
| Dissolved Oxygen        |               | 6 mg/l min. | 1/week                  | Grab            |
| Fecal Coliform Colonies | 1000          | 2000        | 1/week                  | Grab            |
| pH                      | 6.0 - 9.0     | SU          | 1/week                  | Grab            |

# XI. <u>ENFORCEMENT AND SURVEILLANCE ACTIONS:</u>

### A) Inspections

A review of the files indicates the following inspections were performed during the period beginning August 1, 2005 and ending August 1, 2007 for this facility.

Date: March 15, 2007 Inspector: LDEQ Findings and/or Violations:

 The review of DMRs for the period of 2006 to present revealed that the facility exceeded permit limits on several occasions.

- 2. The facility is starting the 1<sup>st</sup> portion of the 3-hour composite at 9:00 am, the permit defines a 3-hour composite to start no earlier than 10:00 am. In addition, the facility missed several weeks of sampling throughout the calendar year of 2006.
- 3. The permittee failed to furnish, within a reasonable time, information (missing DMRs) to the state administrative authority.
- 4. The review of lab reports revealed that on two (2) occasions the sampling holding times for Fecal Coliform and CBOD5 were exceeded.

# B) Compliance and/or Administrative Orders

A review of the files indicates that there are no recent enforcement actions administered against this facility.

# C) DMR Review

A review of the discharge monitoring reports for the period beginning April 1, 2005 through March 31, 2007 has revealed the following violations:

| Month                                   | Parameter                           | *DMR Reported     | Permit Limit     |
|---|-------------------------------------|-------------------|------------------|
| (1) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | T00 M44 A                           | ·- ×Vâluê/        | 40 4             |
| April 2005                              | TSS, Monthly Avg.                   | 13 mg/l           | 10 mg/l          |
|   | TSS, Weekly Avg.                    | 20 mg/l           | 15 mg/l          |
|   | Fecal Coliform, Weekly Avg.         | 45,000 col/100 ml | 2,000 col/100 ml |
|   | Ammonia-Nitrogen, Monthly           | 36.29 lbs/day     | 25 lbs/day       |
|   | Loading                             | 13.82 mg/l        | 10 mg/l          |
|   | Ammonia-Nitrogen, Monthly Avg.      |                   |                  |
| May 2005                                | TSS, Monthly Avg.                   | 18 mg/l           | 10 mg/l          |
|   | TSS, Weekly Avg.                    | 24 mg/l           | 15 mg/l          |
| June 2005                               | TSS, Monthly Loading                | 182.58 lbs/day    | 50 lbs/day       |
|   | TSS, Monthly Avg.                   | 35 mg/l           | 10 mg/l          |
|   | TSS, Weekly Avg.                    | 38 mg/l           | 15 mg/l          |
|   | CBOD₅, Monthly Loading              | 75.91 lbs/day     | 25 lbs/day       |
|   | CBOD₅, Monthly Avg.                 | 15 mg/l           | 5 mg/l           |
|   | CBOD₅, Weekly Avg.                  | 21 mg/l           | 8 mg/l           |
| <u>[</u>                                | Fecal Coliform, Monthly Avg.        | 2,659 col/100 ml  | 1,000 col/100 ml |
|   | Fecal Coliform, Weekly Avg.         | 55,000 col/100 ml | 2,000 col/100 ml |
|   | Dissolved Oxygen, Monthly Avg.      | 5.3 mg/l          | 6 mg/l min.      |
|   | Ammonia-Nitrogen, Monthly           | 46.97 lbs/day     | 10 lbs/day       |
|   | Loading                             | 9.45 mg/l         | 2 mg/l           |
|   | Ammonia-Nitrogen, Monthly Avg.      | 11.4 mg/l         | 4 mg/l           |
|   | Ammonia-Nitrogen, Weekly Avg.       |                   | _                |
| July 2005                               | No DMRs on file                     |                   |                  |
| August 2005                             | No DMRs on file                     |                   |                  |
| September 2005                          | TSS, Monthly Loading                | 148.22 lbs/day    | 50 lbs/day       |
|   | TSS, Monthly Avg.                   | 18 mg/l           | 10 mg/l          |
|   | TSS, Weekly Avg.                    | 30 mg/l           | 15 mg/l          |
|   | CBOD <sub>5</sub> , Monthly Loading | 88.34 lbs/day     | 25 lbs/day       |
|   | CBOD <sub>5</sub> , Monthly Avg.    | 10 mg/l           | 5 mg/l           |
|   | CBOD <sub>5</sub> , Weekly Avg.     | 13 mg/l           | 8 mg/l           |
|   | Fecal Coliform, Monthly Avg.        | 1,561 col/100 ml  | 1,000 col/100 ml |
|   | Fecal Coliform, Weekly Avg.         | 7,500 col/100 ml  | 2,000 col/100 ml |
|   | Ammonia-Nitrogen, Monthly           | 139.98 lbs/day    | 10 lbs/day       |
|   | Loading                             | 14.68 mg/l        | 2 mg/l           |
|   | Ammonia-Nitrogen, Monthly Avg.      | 16.40 mg/l        | 4 mg/l           |

|                  | Ammonia-Nitrogen, Weekly Avg.                            |  |                                  |
|------------------|--|--|----------------------------------|
| October 2005     | No DMRs on file  |  |                                  |
| November 2005    | TSS, Monthly Loading                                     | 214.74 lbs/day                         | 50 lbs/day                       |
| 11010IIIDGI 2000 | TSS, Monthly Avg.  | 19 mg/l                                | 10 mg/l                          |
|                  | TSS, Weekly Avg.   | 19 mg/l                                | 15 mg/l                          |
| ii .             | CBOD <sub>5</sub> , Monthly Loading                      | 101.72 lbs/day                         | 25 lbs/day                       |
|                  | CBOD <sub>5</sub> , Monthly Avg.                         | 9 mg/l                                 | 5 mg/l                           |
|                  | CBOD <sub>5</sub> , Weekly Avg.                          | 9 mg/l                                 | 8 mg/i                           |
|                  | Ammonia-Nitrogen, Monthly                                | 49.28 lbs/day                          | 10 lbs/day                       |
|                  | Loading  | 4.36 mg/l                              | 2 mg/l                           |
| 1)               | Ammonia-Nitrogen, Monthly Avg.                           | 4.36 mg/l                              | 4 mg/l                           |
| _                | Ammonia-Nitrogen, Weekly Avg.                            | _                                      | Ţ                                |
| December 2005    | TSS, Monthly Loading                                     | 268.85 lbs/day                         | 50 lbs/day                       |
|                  | TSS, Monthly Avg.  | 24mg/l                                 | 10 mg/l                          |
|                  | TSS, Weekly Avg.   | 10 mg/l                                | 15 mg/l                          |
|                  | CBOD₅, Monthly Loading                                   | 82.05 lbs/day                          | 25 lbs/day                       |
| \ <u>\</u>       | Fecal Coliform, Monthly Avg.                             | 1,405 col/100 ml                       | 1,000 col/100 ml                 |
|                  | Fecal Coliform, Weekly Avg.                              | 15,000 col/100 ml                      | 2,000 col/100 ml                 |
|                  | Ammonia-Nitrogen, Monthly                                | 32.48 lbs/day                          | 25 lbs/day                       |
|                  | Loading  |  |                                  |
| January 2006     | TSS, Monthly Loading                                     | 207.75 lbs/day                         | 50 lbs/day                       |
|                  | TSS, Monthly Avg.  | 18 mg/l                                | . 10 mg/l                        |
|                  | TSS, Weekly Avg.   | 18 mg/l                                | 15 mg/l                          |
|                  | CBOD <sub>5</sub> , Monthly Loading                      | 115.42 lbs/day                         | 50 lbs/day                       |
|                  | Fecal Coliform, Monthly Avg. Fecal Coliform, Weekly Avg. | 85,000 col/100 ml<br>85,000 col/100 ml | 1,000 col/100 ml                 |
|                  | Ammonia-Nitrogen, Monthly                                | 105.38 lbs/day                         | 2,000 col/100 ml  <br>25 lbs/day |
|                  | Loading  | 100.50 lb5/day                         | 23 103/day                       |
| February 2006    | TSS, Monthly Loading                                     | 224.06 lbs/day                         | 50 lbs/day                       |
| 1                | TSS, Monthly Avg.  | 19 mg/l                                | 10 mg/l                          |
|                  | TSS, Weekly Avg.   | 27 mg/l                                | 15 mg/l                          |
|                  | CBOD <sub>5</sub> , Monthly Loading                      | 113.50 lbs/day                         | 50 lbs/day                       |
| 1                | Fecal Coliform, Monthly Avg.                             | 50,951 col/100 ml                      | 1,000 col/100 ml                 |
|                  | Fecal Coliform, Weekly Avg.                              | 78,000 col/100 ml                      | 2,000 col/100 ml                 |
|                  | Ammonia-Nitrogen, Monthly                                | 122.22 lbs/day                         | 25 lbs/day                       |
|                  | Loading  | 10.50 mg/l                             | 10 mg/l                          |
| <br>             | Ammonia-Nitrogen, Monthly Avg.                           |  |                                  |
| March 2006       | TSS, Monthly Loading                                     | 306.91 lbs/day                         | 50 lbs/day                       |
| 1)               | TSS, Monthly Avg.  | 26 mg/l                                | 10 mg/l                          |
|                  | TSS, Weekly Avg.   | 26 mg/l                                | 15 mg/l                          |
|                  | CBOD <sub>5</sub> , Monthly Loading                      | 141.65 lbs/day                         | 50 lbs/day                       |
| <b>)</b>         | CBOD <sub>5</sub> , Monthly Avg.                         | 12 mg/l                                | 10 mg/l                          |
|                  | Fecal Coliform, Monthly Avg.                             | 48,000 col/100 ml                      | 1,000 col/100 ml                 |
|                  | Fecal Coliform, Weekly Avg. Ammonia-Nitrogen, Monthly    | 48,000 col/100 ml                      | 2,000 col/100 ml                 |
| <b>}</b> }       | Loading  | 198.31 lbs/day<br>16.8 mg/l            | 25 lbs/day<br>10 mg/l            |
|                  | Ammonia-Nitrogen, Monthly Avg.                           | 10.5 1119/1                            | 10 mg/i                          |
| April 2006       | TSS, Monthly Loading                                     | 331.52 lbs/day                         | 50 lbs/day                       |
|                  | TSS, Monthly Avg.  | 28 mg/l                                | 10 mg/l                          |
|                  | TSS, Weekly Avg.   | 28 mg/l                                | 15 mg/l                          |
|                  | CBOD <sub>5</sub> , Monthly Loading                      | 224.96 lbs/day                         | 50 lbs/day                       |
|                  | CBOD <sub>5</sub> , Monthly Avg.                         | 19 mg/l                                | 10 mg/l                          |
|                  | CBOD <sub>5</sub> , Weekly Avg.                          | 19 mg/l                                | 15 mg/l                          |
|                  | Fecal Coliform, Monthly Avg.                             | 1,600 col/100 ml                       | 1,000 col/100 ml                 |

|                | Ammonia-Nitrogen, Monthly<br>Loading  | 118.40 lbs/day   | 25 lbs/day   |
|----------------|---|--|--|
| May 2006       | TSS, Monthly Loading  | 346.22 lbs/day   | 50 lbs/day   |
| , =            | TSS, Monthly Avg.   | 29 mg/l  | 10 mg/l  |
|                | TSS, Weekly Avg.  | 37 mg/l  | 15 mg/l  |
|                | CBOD <sub>5</sub> , Monthly Loading   | 179.93 lbs/day   | 50 lbs/day   |
|                | CBOD <sub>5</sub> , Monthly Avg.  | 15 mg/l  | 10 mg/l  |
|                | CBOD <sub>5</sub> , Weekly Avg.   | 20 mg/l  | 15 mg/l  |
|                | Ammonia-Nitrogen, Monthly   | 3,324.23 lbs/day   | 25 lbs/day   |
|                | Loading   |  | •  |
| June 2006      | TSS, Monthly Loading  | 293.58 lbs/day   | 50 lbs/day   |
|                | TSS, Monthly Avg.   | 24 mg/l  | 10 mg/l  |
|                | TSS, Weekly Avg.  | 25 mg/l  | 15 mg/l  |
|                | CBOD <sub>5</sub> , Monthly Loading   | 124.66 lbs/day   | 25 lbs/day   |
|                | CBOD₅, Monthly Avg.   | 10 mg/l  | 5 mg/l <sup>*</sup>  |
|                | CBOD <sub>5</sub> , Weekly Avg.   | 11 mg/l  | 8 mg/i   |
|                | Fecal Coliform, Monthly Avg.  | 1,349 col/100 ml   | 1,000 col/100 ml   |
|                | Fecal Coliform, Weekly Avg.   | 3,900 col/100 ml   | 2,000 col/100 ml   |
|                | Ammonia-Nitrogen, Monthly   | 77.24 lbs/day  | 10 lbs/day   |
|                | Loading   | 6.41 mg/l  | 2 mg/l   |
|                | Ammonia-Nitrogen, Monthly Avg.  | 8.65 mg/l  | 4 mg/l   |
|                | Ammonia-Nitrogen, Weekly Avg.   | Ĭ  | J  |
| July 2006      | TSS, Monthly Loading  | 327.44 lbs/day   | 50 lbs/day   |
| •              | TSS, Monthly Avg.   | 27 mg/l  | 10 mg/l  |
|                | TSS, Weekly Avg.  | 30 mg/l  | 15 mg/l  |
|                | CBOD <sub>5</sub> , Monthly Loading   | 107.07 lbs/day   | 25 lbs/day   |
|                | CBOD <sub>5</sub> , Monthly Avg.  | 9 mg/l   | 5 mg/l   |
|                | CBOD₅, Weekly Avg.  | 10 mg/l  | 8 mg/l   |
|                | Fecal Coliform, Monthly Avg.  | 10,020 col/100 ml  | 1,000 col/100 ml   |
|                | Fecal Coliform, Weekly Avg.   | 60,000 col/100 ml  | 2,000 col/100 ml   |
|                | Ammonia-Nitrogen, Monthly   | 80.53 lbs/day  | 10 lbs/day   |
|                | Loading   | 6.58 mg/l  | 2 mg/l   |
|                | Ammonia-Nitrogen, Monthly Avg.  | 9.71 mg/l  | 4 mg/l   |
|                | Ammonia-Nitrogen, Weekly Avg.   |  |  |
| August 2006    | TSS, Monthly Loading  | 431.90 lbs/day   | 50 lbs/day   |
| •              | TSS, Monthly Avg.   | 25 mg/l  | 10 mg/l  |
|                | TSS, Weekly Avg.  | 34 mg/l  | 15 mg/l  |
|                | CBOD₅, Monthly Loading  | 196.25 lbs/day   | 25 lbs/day   |
|                | CBOD₅, Monthly Avg.   | 11 mg/i  | 5 mg/l   |
|                | ,,,,  | 1 1 1119/1   |  |
| l              | CBOD <sub>5</sub> , Weekly Avg.   | 13 mg/l  | 8 mg/l   |
|                |   |  |  |
|                | CBOD <sub>5</sub> , Weekly Avg.   | 13 mg/l  | 8 mg/l   |
|                | CBOD <sub>5</sub> , Weekly Avg. Fecal Coliform, Monthly Avg.  | 13 mg/l<br>2,672 col/100 ml  | 8 mg/l<br>1,000 col/100 ml   |
|                | CBOD <sub>5</sub> , Weekly Avg.<br>Fecal Coliform, Monthly Avg.<br>Fecal Coliform, Weekly Avg.  | 13 mg/l<br>2,672 col/100 ml<br>55,000 col/100 ml   | 8 mg/)<br>1,000 col/100 ml<br>2,000 col/100 ml   |
|                | CBOD₅, Weekly Avg.<br>Fecal Coliform, Monthly Avg.<br>Fecal Coliform, Weekly Avg.<br>Ammonia-Nitrogen, Monthly  | 13 mg/l<br>2,672 col/100 ml<br>55,000 col/100 ml<br>164.98 lbs/day   | 8 mg/l<br>1,000 col/100 ml<br>2,000 col/100 ml<br>10 lbs/day   |
|                | CBOD₅, Weekly Avg.<br>Fecal Coliform, Monthly Avg.<br>Fecal Coliform, Weekly Avg.<br>Ammonia-Nitrogen, Monthly<br>Loading   | 13 mg/l<br>2,672 col/100 ml<br>55,000 col/100 ml<br>164.98 lbs/day<br>8.35 mg/l<br>12.30 mg/l  | 8 mg/l<br>1,000 col/100 ml<br>2,000 col/100 ml<br>10 lbs/day<br>2 mg/l   |
| September 2006 | CBOD <sub>5</sub> , Weekly Avg. Fecal Coliform, Monthly Avg. Fecal Coliform, Weekly Avg. Ammonia-Nitrogen, Monthly Loading Ammonia-Nitrogen, Monthly Avg. Ammonia-Nitrogen, Weekly Loading TSS, Monthly Loading   | 13 mg/l<br>2,672 col/100 ml<br>55,000 col/100 ml<br>164.98 lbs/day<br>8.35 mg/l  | 8 mg/l<br>1,000 col/100 ml<br>2,000 col/100 ml<br>10 lbs/day<br>2 mg/l   |
| September 2006 | CBOD <sub>5</sub> , Weekly Avg. Fecal Coliform, Monthly Avg. Fecal Coliform, Weekly Avg. Ammonia-Nitrogen, Monthly Loading Ammonia-Nitrogen, Monthly Avg. Ammonia-Nitrogen, Weekly Loading TSS, Monthly Loading TSS, Monthly Avg.   | 13 mg/l<br>2,672 col/100 ml<br>55,000 col/100 ml<br>164.98 lbs/day<br>8.35 mg/l<br>12.30 mg/l<br>344.31 lbs/day<br>28 mg/l                   | 8 mg/l<br>1,000 col/100 ml<br>2,000 col/100 ml<br>10 lbs/day<br>2 mg/l<br>4 mg/l<br>50 lbs/day<br>10 mg/l  |
| September 2006 | CBOD <sub>5</sub> , Weekly Avg. Fecal Coliform, Monthly Avg. Fecal Coliform, Weekly Avg. Ammonia-Nitrogen, Monthly Loading Ammonia-Nitrogen, Monthly Avg. Ammonia-Nitrogen, Weekly Loading TSS, Monthly Loading TSS, Monthly Avg. TSS, Weekly Avg.  | 13 mg/l<br>2,672 col/100 ml<br>55,000 col/100 ml<br>164.98 lbs/day<br>8.35 mg/l<br>12.30 mg/l  | 8 mg/l<br>1,000 col/100 ml<br>2,000 col/100 ml<br>10 lbs/day<br>2 mg/l<br>4 mg/l   |
| September 2006 | CBOD <sub>5</sub> , Weekly Avg. Fecal Coliform, Monthly Avg. Fecal Coliform, Weekly Avg. Ammonia-Nitrogen, Monthly Loading Ammonia-Nitrogen, Monthly Avg. Ammonia-Nitrogen, Weekly Loading TSS, Monthly Loading TSS, Monthly Avg. TSS, Weekly Avg. CBOD <sub>5</sub> , Monthly Loading                                    | 13 mg/l<br>2,672 col/100 ml<br>55,000 col/100 ml<br>164.98 lbs/day<br>8.35 mg/l<br>12.30 mg/l<br>344.31 lbs/day<br>28 mg/l                   | 8 mg/l<br>1,000 col/100 ml<br>2,000 col/100 ml<br>10 lbs/day<br>2 mg/l<br>4 mg/l<br>50 lbs/day<br>10 mg/l  |
| September 2006 | CBOD <sub>5</sub> , Weekly Avg. Fecal Coliform, Monthly Avg. Fecal Coliform, Weekly Avg. Ammonia-Nitrogen, Monthly Loading Ammonia-Nitrogen, Monthly Avg. Ammonia-Nitrogen, Weekly Loading TSS, Monthly Loading TSS, Monthly Avg. TSS, Weekly Avg. CBOD <sub>5</sub> , Monthly Loading CBOD <sub>5</sub> , Monthly Avg.   | 13 mg/l<br>2,672 col/100 ml<br>55,000 col/100 ml<br>164.98 lbs/day<br>8.35 mg/l<br>12.30 mg/l<br>344.31 lbs/day<br>28 mg/l<br>32 mg/l        | 8 mg/l<br>1,000 col/100 ml<br>2,000 col/100 ml<br>10 lbs/day<br>2 mg/l<br>4 mg/l<br>50 lbs/day<br>10 mg/l<br>15 mg/l                                   |
| September 2006 | CBOD <sub>5</sub> , Weekly Avg. Fecal Coliform, Monthly Avg. Fecal Coliform, Weekly Avg. Ammonia-Nitrogen, Monthly Loading Ammonia-Nitrogen, Monthly Avg. Ammonia-Nitrogen, Weekly Loading TSS, Monthly Loading TSS, Monthly Loading TSS, Weekly Avg. CBOD <sub>5</sub> , Monthly Loading CBOD <sub>5</sub> , Weekly Avg. | 13 mg/l 2,672 col/100 ml 55,000 col/100 ml 164.98 lbs/day 8.35 mg/l 12.30 mg/l 344.31 lbs/day 28 mg/l 32 mg/l 187.96 lbs/day 15 mg/l 18 mg/l | 8 mg/l<br>1,000 col/100 ml<br>2,000 col/100 ml<br>10 lbs/day<br>2 mg/l<br>4 mg/l<br>50 lbs/day<br>10 mg/l<br>15 mg/l<br>25 lbs/day<br>5 mg/l<br>8 mg/l |
| September 2006 | CBOD <sub>5</sub> , Weekly Avg. Fecal Coliform, Monthly Avg. Fecal Coliform, Weekly Avg. Ammonia-Nitrogen, Monthly Loading Ammonia-Nitrogen, Monthly Avg. Ammonia-Nitrogen, Weekly Loading TSS, Monthly Loading TSS, Monthly Avg. TSS, Weekly Avg. CBOD <sub>5</sub> , Monthly Loading CBOD <sub>5</sub> , Monthly Avg.   | 13 mg/l 2,672 col/100 ml 55,000 col/100 ml 164.98 lbs/day 8.35 mg/l 12.30 mg/l 344.31 lbs/day 28 mg/l 32 mg/l 187.96 lbs/day 15 mg/l         | 8 mg/l<br>1,000 col/100 ml<br>2,000 col/100 ml<br>10 lbs/day<br>2 mg/l<br>4 mg/l<br>50 lbs/day<br>10 mg/l<br>15 mg/l<br>25 lbs/day<br>5 mg/l           |

Town of Kinder, Louisiana Kinder Wastewater Treatment Facility <u>LA0020605</u>; Al <u>19520</u>; <u>PER20070001</u> Page 9

|               | Ammonia-Nitrogen, Monthly              | 170.99 lbs/day    | 10 lbs/day       |
|---------------|--|-------------------|------------------|
|               | Loading                                | 13.65 mg/l        | 2 mg/l           |
|               | Ammonia-Nitrogen, Monthly Avg.         | 14.30 mg/l        | 4 mg/l           |
|               | Ammonia-Nitrogen, Weekly Avg.          |                   |                  |
| October 2006  | TSS, Monthly Loading                   | 265.48 lb/day     | 50 lbs/day       |
|               | TSS, Monthly Avg.                      | 21 mg/l           | 10 mg/l          |
|               | TSS, Weekly Avg.                       | 27 mg/l           | 15 mg/l          |
|               | CBOD₅, Monthly Loading                 | 164.51 lbs/day    | 25 lbs/day       |
|               | CBOD₅, Monthly Avg.                    | 13 mg/l           | 5 mg/l           |
|               | CBOD₅, Weekly Avg.                     | 18 mg/l           | 8 mg/l           |
|               | Fecal Coliform, Monthly Avg.           | 8,495 col/100 ml  | 1,000 col/100 m  |
|               | Fecal Coliform, Weekly Avg.            | 35,000 col/100 ml | 2,000 col/100 m  |
|               | Ammonia-Nitrogen, Monthly              | 190.90 lbs/day    | 10 lbs/day       |
|               | Loading                                | 15.10 mg/l        | 2 mg/l           |
|               | Ammonia-Nitrogen, Monthly Avg.         | 16.40 mg/l        | 4 mg/l           |
|               | Ammonia-Nitrogen, Weekly Avg.          |                   | <u></u>          |
| November 2006 | TSS, Monthly Loading                   | 289.66 lbs/day    | 50 lbs/day       |
|               | TSS, Monthly Avg.                      | 22 mg/l           | 10 mg/l          |
|               | TSS, Weekly Avg.                       | 26 mg/l           | 15 mg/i          |
|               | CBOD <sub>5</sub> , Monthly Loading    | 209.57 lbs/day    | 25 lbs/day       |
|               | CBOD₅, Monthly Avg.                    | 16 mg/l           | 5 mg/l           |
|               | CBOD₅, Weekly Avg.                     | 27 mg/l           | 8 mg/l           |
|               | Fecal Coliform, Monthly Avg.           | 8,322 col/100 ml  | 1,000 col/100 m  |
|               | Fecal Coliform, Weekly Avg.            | 45,000 col/100 ml | 2,000 col/100 m  |
|               | Ammonia-Nitrogen, Monthly              | 123.86 lbs/day    | 10 lbs/day       |
|               | Loading                                | 9.576 mg/l        | 2 mg/l           |
|               | Ammonia-Nitrogen, Monthly Avg.         | 11.50 mg/l        | 4 mg/l           |
| D             | Ammonia-Nitrogen, Weekly Avg.          | 207.70 (5-/       | 50 lb = /d = : : |
| December 2006 | TSS, Monthly Loading                   | 307.72 lbs/day    | 50 lbs/day       |
|               | TSS, Monthly Avg.                      | 24 mg/l           | 10 mg/l          |
|               | TSS, Weekly Avg.                       | 24 mg/l           | 15 mg/l          |
|               | CBOD <sub>5</sub> , Monthly Loading    | 111.23 lbs/day    | 50 lbs/day       |
|               | Fecal Coliform, Monthly Avg.           | 49,953 col/100 ml | 1,000 col/100 m  |
|               | Fecal Coliform, Weekly Avg.            | 45,000 col/100 ml | 2,000 col/100 m  |
|               | Ammonia-Nitrogen, Monthly              | 171.58 lbs/day    | 25 lbs/day       |
|               | Loading Ammonia-Nitrogen, Monthly Avg. | 13.10 mg/l        | 10 mg/l          |
| January 2007  | TSS, Monthly Loading                   | 234.85 lbs/day    | 50 lbs/day       |
|               | TSS, Monthly Avg.                      | 18 mg/l           | 10 mg/l          |
|               | TSS, Weekly Avg.                       | 24 mg/l           | 15 mg/l          |
|               | CBOD <sub>5</sub> , Monthly Loading    | 261.35 lbs/day    | 50 lbs/day       |
|               | CBOD <sub>5</sub> , Monthly Avg.       | 20 mg/l           | 10 mg/l          |
|               | CBOD <sub>5</sub> , Weekly Avg.        | 34 mg/l           | 15 mg/l          |
|               | Fecal Coliform, Monthly Avg.           | 49,935 col/100 ml | 1,000 col/100 m  |
|               | Fecal Coliform, Weekly Avg.            | 65,000 col/100 ml | 2,000 col/100 m  |
|               | Ammonia-Nitrogen, Monthly              | 139.94 lbs/day    | 25 lbs/day       |
|               | Loading                                | 10.50 mg/l        | 10 mg/l          |
|               | Ammonia-Nitrogen, Monthly Avg.         |                   |                  |
| February 2007 | TSS, Monthly Loading                   | 528.57 lbs/day    | 50 lbs/day       |
| •             | TSS, Monthly Avg.                      | 39 mg/l           | 10 mg/l          |
|               | TSS, Weekly Avg.'                      | 49 mg/l           | 15 mg/l          |
|               | CBOD₅, Monthly Loading                 | 193.07 lbs/day    | 50 lbs/day       |
|               | CBOD <sub>5</sub> , Monthly Avg.       | 14 mg/l           | 10 mg/l          |
|               | CBOD <sub>5</sub> , Weekly Avg.        | 19 mg/l           | 15 mg/l          |

Page 10

|            |                                  |                   | <del></del>      |
|------------|----------------------------------|-------------------|------------------|
|            | Fecal Coliform, Monthly Avg.     | 17,944 col/100 ml | 1,000 col/100 ml |
|            | Fecal Coliform, Weekly Avg.      | 60,000 col/100 ml | 2,000 col/100 ml |
|            | Ammonia-Nitrogen, Monthly        | 125.91 lbs/day    | 25 lbs/day       |
|            | Loading                          | ·                 | •                |
| March 2007 | TSS, Monthly Loading             | 696.15 lbs/day    | 50 lbs/day       |
|            | TSS, Monthly Avg.                | 51 mg/l           | 10 mg/l          |
|            | TSS, Weekly Avg.                 | 51 mg/l           | 15 mg/l          |
|            | CBOD₅, Monthly Loading           | 191.10 lbs/day    | 50 lbs/day       |
|            | CBOD <sub>5</sub> , Monthly Avg. | 14 mg/l           | 10 mg/l          |
|            | Fecal Coliform, Monthly Avg.     | 38,000 col/100 ml | 1,000 col/100 ml |
|            | Fecal Coliform, Weekly Avg.      | 38,000 col/100 ml | 2,000 col/100 ml |
|            | Ammonia-Nitrogen, Monthly        | 144.69 lbs/day    | 25 lbs/day       |
|            | Loading                          | 10.6 mg/l         | 10 mg/l          |
|            | Ammonia-Nitrogen, Monthly Avg.   |                   | _                |

# XII. ADDITIONAL INFORMATION:

The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon water quality studies. These studies may indicate the need for advanced/more advanced wastewater treatment. Studies of similar dischargers and receiving water bodies have resulted in monthly average effluent limitations of 5 mg/l CBOD<sub>5</sub>, and 2 mg/l NH<sub>3</sub>-N. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.605 MGD.

Effluent loadings are calculated using the following example:

CBOD: 8.34 lb/gal x 0.605 MGD x 10 mg/l = 50 lb/day

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.50 and 1.0 MGD.

| Effluent Characteristics | Monitoring Requirements |                 |  |
|--------------------------|-------------------------|-----------------|--|
|                          | Measurement             | Sample          |  |
|                          | Frequency               | <u>Type</u>     |  |
| Flow                     | Continuous              | Recorder        |  |
| CBOD <sub>5</sub>        | 1/week                  | 3 Hr. Composite |  |
| Total Suspended Solids   | 1/week                  | 3 Hr. Composite |  |
| Ammonia-Nitrogen         | 1/week                  | 3 Hr. Composite |  |
| Dissolved Oxygen         | 1/week                  | Grab            |  |
| Fecal Coliform Bacteria  | 1/week                  | Grab            |  |
| рН                       | 1/week                  | Grab            |  |

### **Pretreatment Requirements**

Based upon consultation with LDEQ pretreatment personnel, general pretreatment language will be used due to the lack of either an approved or required pretreatment program.

# XIII TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

# XIV REFERENCES:

<u>Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy,"</u> Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

<u>Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards,"</u> Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

<u>Low-Flow Characteristics of Louisiana Streams</u>, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

<u>LPDES Permit Application to Discharge Wastewater</u>, Town of Kinder, Louisiana, Kinder Wastewater Treatment Facility, March 1, 2007.